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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,771	01/20/2004	Tomotaka Yokoyama	0524-0136.01	3525

7590 08/29/2006

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EXAMINER

KILIMAN, LESZEK B

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/761,771

Applicant(s)

YOKOYAMA ET AL.

Examiner

leszek b. kiliman

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-13 and 23-26 is/are allowed.
- 6) ☒ Claim(s) 14-22 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date with application.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14-22, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe'343 or '465.

Watanabe'343 or '465 teach a manufacture method of a glass substrate for an information recording medium, comprising steps of immersing the glass substrate in a heated chemical reinforcing treatment liquid and subjecting an ion on a glass substrate surface layer to ion exchange with an ion in the chemical reinforcing treatment liquid to chemically reinforce the glass substrate and then treating the surface of the glass with a liquid containing acid. See Watanabe'343, summary of the invention, column 3, lines 45-67, column 4, lines 35-67, column 5, lines 5-67, lines 40-67 for chemical reinforcing step, column 6, lines 1-18 for surface roughness, tables I and II. Watanabe'465, summary of the invention, column 3, lines 30-55, column 4, lines 33-67, column 5, lines 5-67, column 6, lines 1-22, tables I and II.

Art Unit: 1773

Regarding claims 14-22, 27-29 the applied references teach the same AFM measurements to determine surface roughness that is within the claimed values of  $R_{max}$ . It is well known in the art that surface roughness relates to head crash because of the friction forces (see '343 column 12, lines 57-67). It would have been obvious to one having ordinary skill in the art at the time of the invention to optimize a friction coefficient based on a surface roughness since such would improve magnetic properties of the media.

The applicants response filed February 14, 2006 is hereby acknowledged. Claims 14-22 and 27-29 however, remain unpatentable in view of the above grounds of rejections. The arguments have not been found to be persuasive. The examiner believes that the rejections are still proper and are maintained.

Claims 9-13 and 23-26 have been allowed in view of the prior art of record, because the step of the chemical reinforcing with a liquid containing silicofluoric acid is not thought or suggested.

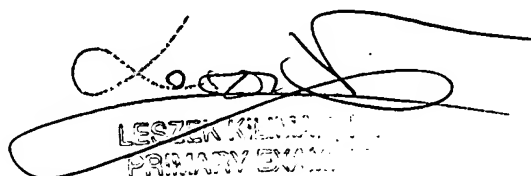
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1773

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to leszek b. kiliman whose telephone number is 571-272-1509. The examiner can normally be reached on M-T, 6.30-5.00.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

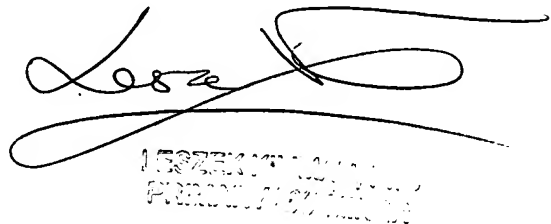


LESZEK KILIMAN  
PRIMARY EXAMINER

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lk

A handwritten signature in black ink, appearing to read "L. S. S.", is written over a rectangular stamp. The stamp contains the text "15725117" and "P. 10/761,771" in a bold, sans-serif font.